FISHER-ROSEMOUNT

RS3™

Software Release Notes

Performance Series 1, Release 1.1

October 1996
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RS3™

Software Release Notes

About This Manual

This document provides information about Performance Series™ Version 1, Release 1 (P1.1) software.

Section 1: Lists Version P1, Release 1 enhancements to RS3™.

Section 2: Lists software and hardware requirements for Version P1, Release 1.

Section 3: Lists system improvements, including corrected software discrepancies.

Section 4: Lists changes to the P1 manual set since released.

Changes for This Release

The major enhancement changes for this release are covered in Section 1.

The major discrepancy fixes are covered in Section 3.

Revision Level for This Manual

For This Software Version:	Refer to This Document:		
	Title	Date	Part Number
P1R1.1	Software Release Notes	October 1996	10P56870101
P1R1.0	Software Release Notes	May 1996	1984-2818-0110
18R2.5	Software Release Notes	April 1996	1984-2818-01x9
18R2.4	Software Release Notes	October 1995	1984-2818-01x8
18R2.3	Software Release Notes	June 1995	1984-2818-01x7
18R2.2	Software Release Notes	May 1995	1984-2818-01x6
18R2.1	Software Release Notes	January 1995	1984-2818-01x5
18R2	Software Release Notes	August 1994	1984-2818-01x4
18R1.5	Software Release Notes	November 1993	1984-2818-01x3
18R1	Software Release Notes	October 1993	1984-2818-01x2
17R2	Software Release Notes for Version 17	December 1992	1984-2817-01x3

References to Other Manuals

References to other RS3 user manuals list the manual, chapter, and sometimes the section as shown below.

Sample Entries:

For ..., see CC: 3.

For ..., see CC: 1-1.

Abbreviations of Manual Titles

- **AL** = Alarm Messages
- **BA** = ABC Batch
- **BQ** = Batch Quick Reference Guide
- **CB** = ControlBlock Configuration
- **CC** = Console Configuration
- **CQ** = Configuration Quick Reference Guide
- **DT** = Disk and Tape Functions
- **IF** = Intelligent Fuzzy Logic Control Manual
- **IO** = I/O Block Configuration
- **IT** = Intelligent Tuner Manual
- **OP** = Operator's Guide
- **OV** = System Overview and Glossary
- **PW** = PeerWay Interfaces
- **RB** = Rosemount Basic Language
- **RI** = RNI Release Notes and Installation Guide
- **RP** = RNI Programmer's Reference Manual
- **SP** = Site Preparation and Installation
- **SQ** = Service Quick Reference Guide
- **SV** = Service

Reference Documents

Prerequisite Documents

You should be familiar with the information in the following documents before using this manual:

System Overview Manual and Glossary	1984-2640-21x0
Software Loading and Upgrade Procedure, Including Batch	10P56870201

Related Documents

You may find the following documents helpful when using this manual:

ABC Batch Quick Reference Guide	1984-2818-1103
ABC Batch Software Manual	1984-2654-21x0
Alarm Messages Manual	1984-2657-19x1
Configuration Quick Reference Guide	1984-2812-0808
Console Configuration Manual	1984-2643-21x0
ControlBlock Configuration Manual	1984-2646-21x0
I/O Block Configuration Manual	1984-2645-21x0
Operator's Guide	1984-2647-19x1
PeerWay Interfaces Manual	1984-2650-21x0
RNI Programmer's Reference Manual	1984-3356-02x1
RNI Release Notes and Installation Guide	1984-3357-02x1
Rosemount Basic Language Manual	1984-2653-21x0
Service Manual, Volume 1	1984-2648-21x0
Service Manual, Volume 2	1984-2648-31x0
Service Quick Reference Guide	1984-2816-0904
Site Preparation and Installation Manual	1984-2642-21x0
Software Discrepancies for Performance Series 1	10P56870301
User Manual Master Index	1984-2641-21x0

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Section 1:
P1 Release 1.1 Enhancements to RS3

The software numbers of the subsystems for P1, Release 1.1 are as follows:

- Console P1.04
- System Manager Station P1.05
- Coordinator Processor (CP) P1.05
- Controller Processor P1.04
- Supervisory Computer Interface P1.02

Table 1.1 describes new features of the P1 releases.

NOTE: In Table 1.1, the field labeled “For More Information” tells you where to find additional detail, either in these release notes, or in the reference manuals. A key to the manual abbreviations that are used in the table appears in the front of this document.

New P1 Software Features

The following table lists new features and enhancements to P1.

Table 1.1. Summary of New Software Features in P1

Feature	Description	For More Information	When Added
Alarm Banner Enhancement	The format for standard and [EXCH] alarm list description has been modified to be more informative.	AL:1 OP:6	P1R1.0
AMS Pass-through support	Several code-level changes were made to allow the RS3 to pass through AMS (Asset Management Solutions) messages from the field to a computer running PERFORMANCE™ software. The RS3 does not process this information.	--	P1R1.0
Crash Dump Format	The crash dump format, which applies to crashes occurring in the console and in the CP/Controller is being expanded to include more system stack, more user stack and some registers.	--	P1R1.0
Disk-only Console	A modified version of the Engineering Console without a supporting tape or floppy drive. This is not the same as the System Manager Station (SMS).	DT:	P1R1.0
HART Command	The “Stop HART Comm” command must be executed anytime a third party HART valve product is being used	IO:8	P1R1.0
Modbus	The new Modbus broadcast message will allow PLCB’s to be configured with PLC=0 to designate a “broadcast” message. This will only apply to write messages and for this reason the user will not be allowed to configure the read option in this case. Whenever PLC=0 has been configured on a PLCB, a text field “Broadcast” will appear to inform the configurer what he has done. Broadcast messages of this kind will only apply to the protocols “Modbus/ASCII”, “Modbus/RTU” and “Modbus/RTU-2”.	--	P1R1.0
PID Velocity Algorithm Option	The velocity option (vel) in the Options (Opt) field of a PID block is now valid for PI action.	CB:2	P1R1.0
PLC Block Enhancement	Add new Read and Write Filter options that allows reading/writing a PLC block at a configurable rather than a default system time.	IO:9	P1R1.0
Read Filter	See PLC Block Enhancement in this table.	--	P1R1.0
Russian Console Enhancement	English and Cyrillic text can now be mixed in plant configurations. Callup buttons can now be programmed in either Cyrillic or Roman text.	CC:1	P1R1.0

(continued on next page)

Table 1.1. Summary of New Software Features in P1

Feature	Description	For More Information	When Added
Smart Field Device Support	RS3 support for the following Smart field devices has been added: MicroMotion 9701 flow transmitter Rosemount 3095FT flow transmitter Rosemount 644 temperature transmitter Rosemount 3144 temperature transmitter Rosemount 3244 temperature transmitter Rosemount 3095 MV mutivariable transmitter Rosemount Analytical WC3000 oxygen analyzer	IO:8	P1R1.0
System Manager Station	A new console is available to work with the NT-based RS3 Operator Station. This is not the same as the disk-only console.	CC:1	P1R1.0
Write Filter	See PLC block enhancement in this table.	--	P1R1.0
New tape drive supported	Support for the Tandberg Tape drive.	RN:4	P1R1.1
New hard disk supported	Support for the IBM DALS-3540 hard drive.	--	P1R1.1

Summary of Recent Hardware Releases

Table 1.2 lists recent hardware which operates in the P1 environment. This is not a complete list, but is provided as a guide to make you aware of new hardware.

Table 1.2. Summary of New Hardware through Version P1, Release 1.1

Part Number	Description	For More Information
10P-5685-0001	Tandberg Tape Drive	RN:4
10P-5665-0001	IBM DALS-540Mb Hard Drive	RN:4
Model # 6600SM	System Manager Station (SMS)	SV:03 SP:03
--	Disk-only Console	CC:1
10P-5330-0001	Single Board RNI (SBR)	Hardware Installation Instruction 1984-3363-0011
--	MTL Discrete MTL Analog	1984-3363-0003 1984-3363-0004
10P-5093-0001 10P-5096-0001	Fiber Optic PeerWay Extender (PX), Tap A Fiber Optic PeerWay Extender (PX), Tap B	Hardware Installation Instruction 1984-3363-0009
10P-5320-0001	PLC/RBL FlexTerm	Hardware Installation Instruction 1984-3363-0010
10P-5352-0006 10P-5355-0006	Multipoint Discrete I/O FIM, low side switch Multipoint Discrete I/O FIM, high side switch	Hardware Installation Instruction 1984-3363-0013 1984-3363-0014
10P-5270-0001	Direct Connect Termination Panel	Hardware Installation Instruction 1984-3363-0013
1984-4121-0001 1984-4124-0001	Multipoint Discrete I/O Opto-Termination Panel (A) Multipoint Discrete I/O Opto-Termination Panel (B)	Hardware Installation Instruction 1984-3363-0014
1984-4282-0001	Multi-FIM Termination Panel	SV:6 SP:7
1984-4167-0001	High Density Termination Panel	SV:6 SP:7
10P-5066-0002	Mag Innovision 15 Inch CRT Monitor	--

(continued on next page)

Table 1.2. Summary of New Hardware through Version P1, Release 1.1

Part Number	Description	For More Information
1984-0390-000x	AC/DC Power Supply (Without Battery Backup)	SV:1 SP:5
1984-4302-000x 1984-4329-0001 1984-4329-0002 1984-4329-0003 1984-4433-xxxx	Remote I/O Power Supply AC Distribution Block DC Distribution Block (10 circuits) DC Distribution Block (1 circuit) DC I/O Power Cable (B Bus)	SV:1 SP:2
1984-3211-000x 1984-3214-000x	Optical PeerWay Tap Box (A) Optical PeerWay Tap Box (B)	SV:02
1984-3202-00xx	OI Processor V (68040)	SV:03
1984-3286-000x 1984-3246-000x 1984-2633-000x	Sony 14 Inch CRT Monitor CPD-1430 Sony 14 Inch CRT Monitor CPD-1304S Sony 14 Inch CRT Monitor C-1404S	SV:03
 1984-3222-0004 1984-3222-1004 1984-3222-2004 1984-2889-0004 1984-2889-1004 1984-1978-000x	Keyboard Interface Card (KBI): Standard Keyswitch and Dual Keyswitch Remote Keyswitch Password Security Standard Keyswitch Remote Keyswitch Standard Keyswitch (without video isolation)	SV:03
1984-3289-000x 1984-3389-000x	Viper 2060S Magnetic Tape Drive Viper 2150S Magnetic Tape Drive	SV:03
1984-3318-000x	Fujitsu DL3800 Printer	SV:03
1984-3270-0001	ControlFile Data Bus Terminator board	SV:04
1984-4080-0001	Multipoint Discrete I/O FIM	SV:06
1984-4167-000x 1984-4282-000x 1984-4344-000x	High-Density Isolated Discrete Termination Panel Multi-FIM Discrete Termination Panel Standard Remote Termination Panel	SV:06
1984-3278-000x	Fiber Optic I/O Converter	SV:06
1984-4308-000x	Loop Power Module	SV:06
1984-4414-000x 1984-4418-000x	Multipoint Analog Input FIM Multipoint Analog Output FIM	SV:06

(continued on next page)

Table 1.2. Summary of New Hardware through Version P1, Release 1.1

Part Number	Description	For More Information
1984-2530-0001 1984-2627-0001 1984-3261-0002	QBI Hardware Kit, MicroVax II Series QBI Hardware Kit, MicroVax 3xxx Series and VAX 4xxx series QBUS Board 1 (CPU Card)	SV:07
1984-4323-0001984-4270-0001984-4457-0002 1984-4386-000x	RS3 Network Interface (RNI) RNI Power Regulator RNI PeerWay Interface RNI CPU board RNI cabinet assembly	SV:07

Hard Drive Compatibility

Table 1.3 lists the hard drives that are compatible with the latest software revisions.

NOTE: 68000 and 68020 consoles are not supported in P1. Only the 68040 console is supported.

Table 1.3. Console Hard Drive Compatibility Matrix

Console Software Revision (English)	040 with V10.10 Boot ROMS or higher	040 with V10.08 Boot ROMS	040 with V10.04–V10.07 Boot ROMS	All 68020	All 68000
P1.04	IBM DALS-3540 LPS105S LPS170S 270S	LPS105S LPS170S 270S	N/A	N/A**	N/A*
P1.02	LPS105S LPS170S 270S	LPS105S LPS170S 270S	N/A	N/A**	N/A*
V18.03 and up	LPS105S LPS170S 270S	LPS105S LPS170S 270S	LPS105S LPS170S 270S	LPS105S LPS170S 270S	N/A*
V17	N/A***	N/A***	N/A***	LPS105S	N/A*
V16	N/A***	N/A***	N/A***	LPS105S	N/A*
V15.20	N/A***	N/A***	N/A***	LPS 105S LPS170S 270S	LPS 105S LPS170S 270S
V15.14 & lower	N/A***	N/A***	N/A***	LPS105S	LPS105S

* 68000 consoles not supported by these software versions.

* * 68020 consoles not supported by these software versions.

***68040 consoles not supported by these software versions.

(1) The IBM DALS–3540 Disk Drive is only supported when used with the Tandberg TDC–3660 Tape Drive.

Floppy Drive Compatibility

P1 software does not support floppy drives.

Tape Drive Compatibility

Table 1.4 lists the tape drives that are compatible with the latest software revisions.

NOTE: 68000 and 68020 consoles are not supported in P1. Only the 68040 console is supported.

Table 1.4. Tape Drive Compatibility Matrix

Console Software Revision (English)	040 with V10.10 Boot ROMs or higher	040 with V10.08 Boot ROMs	040 with V10.04- V10.07 Boot ROMs	020 with V9.18 Boot ROMs or higher	020 with V9.17 or lower Boot ROMs	All 68000
P1.04	Tandberg TDC-3660; Viper 2150S	Viper 2150S	N/A	N/A**	N/A**	N/A*
P1.02	Viper2150S† 2060S‡, Scorpion‡	Viper2150S† 2060S‡, Scorpion‡	N/A	N/A**	N/A**	N/A*
V18.03 & up	Viper2150S† 2060S‡, Scorpion‡	Viper2150S† 2060S‡, Scorpion‡	Viper2150S† 2060S, Scorpion	Viper2150S†, 2060S, Scorpion	Scorpion	N/A*
V17	N/A***	N/A***	N/A***	Viper2060S or Scorpion	Scorpion	N/A*
V16	N/A***	N/A***	N/A***	Scorpion	Scorpion	N/A*
V15.20	N/A***	N/A***	N/A***	Viper2150S†, 2060S, Scorpion	Scorpion	Scorpion
V15.14	N/A***	N/A***	N/A***	Viper2060S or Scorpion	Scorpion	Scorpion
V15.12 & lower	N/A***	N/A***	N/A***	Scorpion	Scorpion	Scorpion

† The Viper2150S can read a tape made on a Scorpion or Viper2060S, but not vice versa.

‡ These tape drives are only supported with a SCSI Board I (1984-1140-0001 or -0003)

* 68000 is not supported by these software versions.

* * 68020 is not supported by these software versions.

*** 68040 is not supported by these software versions.

System Manager Station Compatibility

Table 1.5. System Manager Station Compatibility Matrix

Software Revision	Hard Drive	Tape Drive
P1	IBM DALS-3540	Tandberg

Section 2:
P1 Software and Hardware Requirements

This section provides P1, Release 1.1 software and hardware requirements, and information on temporary coexistence of RS3 software versions to facilitate plant upgrades.

Changes in RS3 Hardware Requirements

MiniConsoles, 68000, and 68020 consoles and multiple CRT MTCCs are not supported in P1 software. SRUs are not supported. No floppy drives are supported in P1 software. P1 controller and CP images only run in MPCII's and CPIV's.

P1 nodes can coexist with certain V18 nodes, and you can configure those nodes from a P1 console.

Contact your Fisher-Rosemount service representative for the available upgrade options.

P1 Requirements

The following tables list hardware and software requirements for P1, Release 1.1. If you are a current user who is upgrading to this version and release, you should make sure that your system meets these requirements. If your system does not, contact your Fisher-Rosemount sales or service representative.

- Table 2.1 CPIV and CPIV+ requirements using P1 software images
- Table 2.2 Image requirements for CPIV with V18 CPIV functionality (no batch)
- Table 2.3 CPII requirements
- Table 2.4 I/O requirements
- Table 2.5 Console processors (68040)
- Table 2.6 Console accessories (trackball, etc.)
- Table 2.7 Miscellaneous system components

PeerWay Node Type Coexistence Combinations

If one ControlFile is upgraded to a new software version, all other nodes on the PeerWay must be upgraded to the same level. A mixture of ControlFile software functionality can coexist on a P1 PeerWay. These are the nodes types and software that can coexist in a P1 environment:

1. A ControlFile with CPIV (P1) and MPCII (P1) — with and without Batch
2. A ControlFile with CPIV (V18), MPCII (V18), and MLC (V9) — no Batch
3. A ControlFile with CPMax (V18), MPCI (V18), and MLC (V9) — no Batch
4. Console (P1)
5. SCI (P1)
6. HIA (V11)

A PeerWay is considered to be a P1 PeerWay if it has a node described by #1 or #4 above.

The valid V18 version that can coexist is the released version of V18 that is included on the released P1 tapes. The software numbers for the coexisting images are as follows:

- Coordinator Processor (CPMax V18) V18.09
- Coordinator Processor (CPIV V18) V18.11
- Controller Processor (MPCII V18) V18.07
- Controller Processor (MPCI V18) V18.07

Determining Upgrade Requirements

After you obtain information about your ControlFile, use Table 2.1, Table 2.2, and Table 2.3 to determine if your current installation supports the new software.

CP Requirements

Table 2.1. CPIV and CPIV+ Requirements Using P1 Software Images

CP		Memory		Controllers		Images	
Type	**Boot ROM**	**Size/Type**	**Part Number**	**Type**	**Boot ROM**	**Control Type**	**File Name**
CPIV+ CPIV	4.02 4.02	2MB NV RAM 1MB NV RAM 1MB Bubble	1984-2347-0021 1984-2347-0011 1984-1598-0001	MPCII	6.05	MPC2+	$$MPC2+_xx
						PLC+	
						MUX+	
						RBLC2	$$RBLC2_xx
		2MB NV Memory	1984-2347-0021	MPCII	6.05	ABC Batch	$CP HBA-P1

Table 2.2. Image Requirements for CPIV with V18 CPIV Functionality (No Batch)

CP		Memory		Controllers		Images	
Type	**Boot ROM**	**Size/Type**	**Part Number**	**Type**	**Boot ROM**	**Control Type**	**File Name**
CPIV+ CPIV	4.02 4.02	2MB NV RAM 1MB NV RAM 1MB Bubble	1984-2347-0021 1984-2347-0011 1984-1598-0001	MPCII	6.05	MPC2+	$$MPC2+_xx
						PLC+	
						MUX+	
						RBLC2	$$RBLC2_xx
CPIV+	4.02	2MB NV RAM 1MB NV RAM 1MB Bubble	1984-2347-0021 1984-2347-0011 1984-1598-0001	CC	5.15	CC	$$STDCxx*
				MLC		SSC	
				MUX		Mux	
				SSC		SSC	

* If you upgrade to a CPIV or CPIV+ from a CPII with CC, MLC/SSC, or MUX, you must load the $$STDCxx image to the CPIV/CPIV+ as an additional image.

NOTE: MPCI's are not supported in a CPIV ControlFile with P1 software. MPCI's must be upgraded to MPCII's.

Table 2.3. CPII Requirements

CP		Memory	Memory	Controllers		Images	
Type	**Boot ROM**	**Size/Type**	**Part Number**	**Type**	**Boot ROM**	**Control Type**	**File Name**
CPII	2.70	2MB NV RAM 1MB NV RAM 1MB Bubble .5MB Bubble .5MB Bubble	1984-2347-0021 1984-2347-0011 1984-1598-0001 1984-1483-000x 1984-1224-000x	CC	5.15	CC	$$CPxx
				MLC	5.15	SSC	
				MUX	5.15	Mux	
				SSC	5.15	SSC	
				MPCI*	5.17	MPC	$$MPCAxx
						SMART	$$SMARTxx
					5.21	MPCAS	$$MPCASxx
						MPCAP	$$MPCAPxx
						MPCAT	$$MPCATxx
						MPTUN	$$MPTUNxx
						PLC	$$PLCMxx

* You can use an MPCII with a CPII if you jumper the MPCII to be an MPCI.

NOTE:

- CPII is supported by CPMAX image only. The CPII standard image is not part of the P1 release.
- CPI is not supported in P1 software. CPI's should be upgraded to CPIV's.

I/O Requirements

Table 2.4. I/O Requirements

Type	Part Number	Card Name	F-Rev	S-Rev	Added Functionality
AO					
CIO	1984-1304-000x	Contact I/O			
	1984-1460-000x(2)	Contact I/O	3.1		
SI					
AIO					
AIO-R	1984-2518-0001	Analog FIC	1.x	1.6	
				4.6	.125 s scan time
AIO-R	1984-2518-0002	Analog FIC	2.1	3.x	
AIO-RS	1984-2519-0002	Analog FIC SMART	2.1	4.4	RIOB
					268 or 275 Handheld
				4.6	.125 s scan time
				4.7	HART Output Block
				4.8	HART Pass through
PIOB	1984-2546-000x	Pulse I/O FIC	1.15		
TIB	1984-2731-000x	Temperature FIC	1.8	3.1	
DIO	1984-4080-000x	MDIO I/O FIM	1.1	3.4	
DIO2	10P-5352-0006 (L) 10P-5355-0006 (H)	MDIOL FIM MDIOH FIM	6.6 (L) 6.7 (H)	3.12	CE compliant
MAI	1984-4414-000x 10P-5404-0004 (EMC compliant)	MAIO Input FIM	1.1 4.1	1.5 2.2	
MAO	1984-4418-000x 10P-5408-0004 (EMC compliant)	MAIO Output FIM	1.1 4.1	1.5 2.2	
MAI-HD	10P-5319-0004	Multipoint Analog Input High-Density (32 points)	4.1	2.2	

(2) If you are using a serial Contact FlexTerm (1984-2576-000x), you must use this card (1984-1460-000x).

Console Requirements

Table 2.5. Console – OI Processor

Processor	Part Number	Boot ROM	Storage	SCSI Adapter
68040	10P 5527 0011 (SMS)	10.10	RS3*T4 TDC 3660 (qic–150) RS3*T3 150S (qic–150) RS3*T2 60S (qic–60) RS3*T1 45S (qic–45)	SCSI Board 2 (1984-3301-0001) SCSI Host Adapter (1984-1140-0001)

Table 2.6. Console Accessories

Keyboard Revisions		Option	Part Number
Device	Revision		
KBI	4.02	Secure Keyboard	10P–5084-2004* 1984-3222-2004
	3.7	Enhanced operator/engineer keyboard	10P–5084-0004* 1984-3222-0004
	1.4	Configuror Keyboard	1984-3222-1004
TB	1.1	Trackball	
DISPPNL	1.3	Operator Keyboard	
OPTPNL1 OPTPNL2 OPTPNL3	1.1	Options Keyboard	1084-1632-000x

* CE compliant

Identify Requirements for other System Components

Table 2.7 lists requirements for other RS3 system components.

Table 2.7. Miscellaneous System Components

System Component	Boot ROM	Processor	Software
RNI			
HIA		60000	
SCI	8.xx	60000/1 MB	
Diogenes	8.xx	60000/1 MB	
MicroVAX with Host Mode			RMT/host software 4.0

Memory Allocations and Plant Program Space

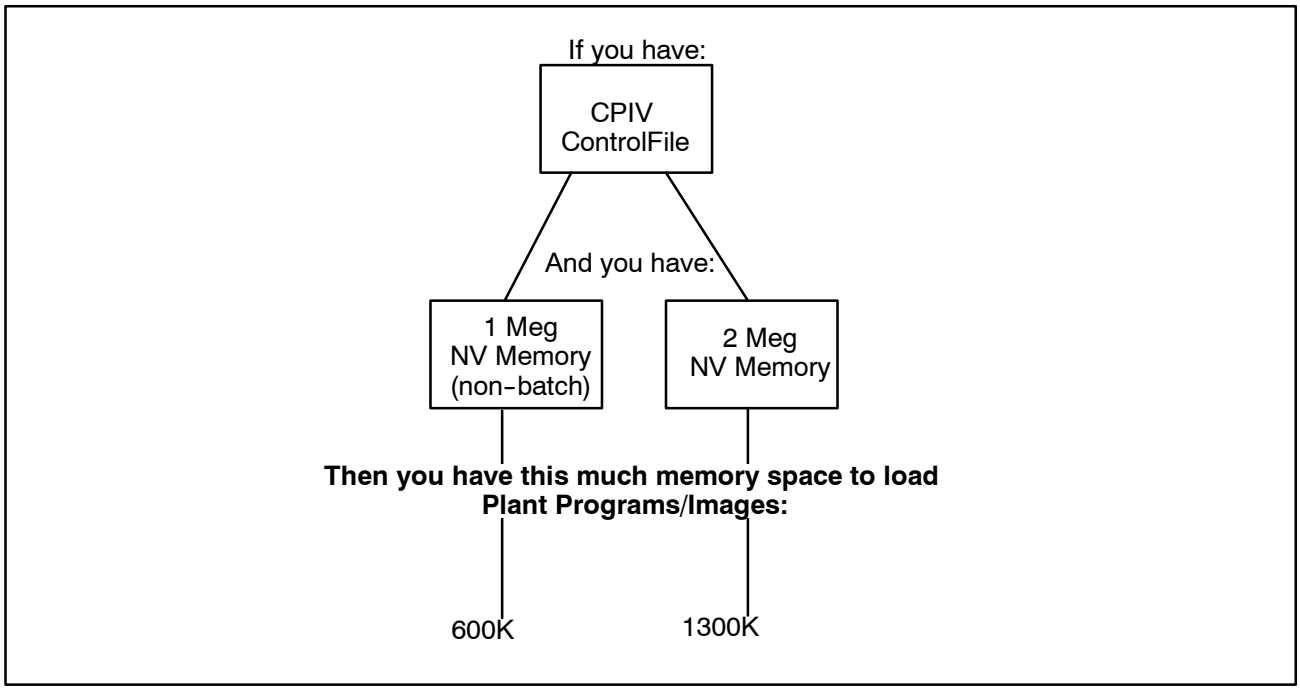

Figure 2.1. Memory Allocations and Plant Program Space

NOTE: Be sure to calculate available space for plant programs and images to be used before upgrading software. Check plant program/ image sizes from file size number in the Plant Program Folder.

Section 3:
System Improvements

This section describes improvements to the RS3 system, including corrected discrepancies.

Corrected Discrepancies

Table 3.1 lists current corrected discrepancies for P1, Release 1.1. Table 3.2 lists previous corrected discrepancies. The table itself is organized alphabetically by subsystem, then by rating, with higher ratings appearing first. The ID column specifies the RS3 subsystem: (Batch, Controller, Console, Comm, CP, Documentation, I/O, or SMS), followed by a number used to track this change. The Rating column contains a two-character code. The letter stands for the type of change made to the software—'D' stands for 'discrepancy'—and the number is a measure of its importance, with 1 being the most important.

NOTE: While many of the descriptions seem to indicate a problem by the way the sentence is phrased, in fact, they are a description of a problem that has been verified and fixed.

Table 3.1. RS3 Corrected Software Discrepancies in P1, Release 1.1

ID	Description	Rating
Controller 802489	If an RS3 Operator Station is displaying a continuous link with a value of 0, and that link is unconfigured in the RS3 Command Console, the unconfigured link is still recognized as "normal" by the RS3 Operator Station. **Fixed.**	D2
Controller 803047	If a customer has HOBs configured by v18 software and he updates to fix the wrong variable problem in PCR 801380 he must delete his HOBS and reconfigure. **Fixed. Reconfiguration is no longer necessary.**	D3
Controller 803041	If a HOB block gets an error on a MAO fim, the tracking value passed to the block driving the HOB will be in error. Recovery will not be smooth. **Fixed.**	D4
Controller 803084	HOB tracking is invoked if HART communications are lost even though the rest of the loop is intact. **Fixed.**	D4

Table 3.1. RS3 Corrected Software Discrepancies in P1, Release 1.1

ID	Description	Rating
CP 803233	In very rare cases, when the CP is doing a lot of tag searches, and some of the tags are longer than 8 characters, a race condition can occur in the CP. The race condition causes the CP to crash. **Fixed.**	D4
SMS 803261	When the SMS is configured to use an enhanced keyboard, the keyboard still behaves as if it is a configuror's keyboard. **Fixed.**	D3

Table 3.2. RS3 Corrected Software Discrepancies through P1, Release 1.0

ID	Description	Rating
Batch 801337	All running recipes, while not downloading scripts or handling exceptions, do disk reads in a tight loop, causing PeerWay problems.	D1
Batch 801183	When two batch operations are run in parallel, “Left CP Data Integrity” errors are generated, up to a rate of 10 alarms/sec.	D2
Batch 801351	A CP goes down before a Unit Recipe start is backed up to bubble memory. When the CP recovers there is no way to restart the Unit Recipe.	D2
Batch 801404	The batch input window on a graphic does not update and display new messages.	D4
Batch 802029	Recipe misses icons in Parallel Recipe execution.	D2
Batch 802190	Occasionally, when calling up a Batch Working Recipe screen, only the top menu is displayed, and the rest of the screen is blank.	D2
Batch 800699	When you restart a Batch Working Recipe suspended in Static mode, the Recipe View menu receives a “Config” warning.	D3
Batch 801066	The recipe info screens do not display all Batch configuration fields.	D3
Batch 800498	Working recipe icon is wrong color after executing.	D4
Batch 800671	Duplicate child task started after power failure.	D4
Batch 801106	The Master Recipe validation may hang with more than 10 warnings or errors.	D4
Batch 801349	The Working Recipe screen displays two STATIC marks if the recipe is put into static while an icon is in the SCHEDULED state.	D4
Batch 801365	A start unit recipe (start_UR) icon does not execute if it does not have a link to a subsequent icon.	D4
Batch 801906	If the ABC Log Folder is full and an operator modifies a Working Recipe, the console may hang or crash and the recipe becomes inaccessible.	D4
CP 152818	Redundant controller processors do not always boot up on the first try.	D4

Table 3.2. RS3 Corrected Software Discrepancies through P1, Release 1.0

ID	Description	Rating
Comm 800256	Error in V18 PeerWay Interface Manual for field codes 5 & 6, page 1-4-7: SCI cannot write to the block mode and output of I/O blocks. SCI can only write to the block mode and output of ControlBlocks.	D1
Comm 800356	SCI cannot read field codes higher than 1500.	D4
Comm 800857	On the SCI, saving the configuration and sending a message pair in quick succession might disable data transmission.	D4
Console 800804	Items defined in event list configuration are not readable when printed from a 68040 console. They print correctly from a 68020 console.	D2
Console 800976	If a block descriptor uses all 24 characters, the BLKDES graphic object does not display the descriptor.	D4
Console 152821	When configuring a console with a blank disk, the default size of the Console Program Folder is too small to boot the console software.	D3
Console 801226	On the Report Config Directory screen, the autoprint status is displayed as a garbage character instead of a “Y” or “N”.	D3
Console 801242	Russian consoles only: The SIB block alarms display garbage characters.	D3
Console 801260	When a graphic is upgraded from V15R5 to V18R2.2, link objects for discrete registers (for example, =1A-10/a) no longer animate in V18.	D3
Console 801615	The loop power module status bits on the field IO status screen for MAIO are displayed in the alarm color whenever they are 1 even if meaningless.	D3
Console 102845	In the tuning display operation, changing the scaling at the left of the faceplate does not change the alarm limit indication.	D4
Console 152623	If the alarm log is not enabled or not defined, a large number of “Illegal Volume/File Name Used” alarms are generated.	D4
Console 152786	When viewing the Disk Directory Peerway screen, all drives are listed under the drive 1 position for several seconds.	D4
Console 800672	Variables of 10 or more characters from SIB or VIB I/O block might cause the console to crash when a report is generated.	D4

Table 3.2. RS3 Corrected Software Discrepancies through P1, Release 1.0

ID	Description	Rating
Console 801076	When creating a boot tape, the default “New Volume Name” can confuse Batch.	D4
Console 801107	Process graphics with complex layering of windows might crash during periods of high alarm activity.	D4
Console 801310	On the 68040 console, block descriptors with 24 or more characters cause the console to crash.	D4
Console 801323	Console crashed during printing of a report. No alarms appeared.	D4
Console 801362	If more than 32 consoles and SRUs are on linked PeerWays, a console might not be able to access a process graphic on a different node.	D4
Console 801376	Task neglected to restore rrow variable to its original value of zero, causing crash dumps.	D4
Console 801417	The console may crash if you press the arrow key on the numeric key pad and move the trackball at the same time.	D4
Console 801469	Problem with graphic in V17 AND V18 R2.1 French console: Duplicating portion of graphic to another location reboots the console.	D4
Controller 801411	If an AOB, AIB, SIB, or HOB is configured with no IO hardware on a point greater than 8, a bad block alarm is generated, making the block useless.	D1
Controller 801849	An upload of the information in a smart output device cannot be completed.	D1
Controller 801360	CB documentation omission: When controllers switch, the data valid flag changes to 0 for one scan cycle of the controller processor.	D2
Controller 801381	The HOB device status displays the the valve serial number instead of the final assembly number. Some users would prefer to see the assembly number.	D3
Controller 801382	RS3 does not allow the fieldvue secondary master to communicate with the RS3.	D3
Controller 800542	When disabled and enabled, a controller might become stuck in standby mode when it comes back up.	D4

Table 3.2. RS3 Corrected Software Discrepancies through P1, Release 1.0

ID	Description	Rating
Controller 800573	In a ControlBlock, the ssm (seconds since midnight) time function can alter the values of subsequent time functions.	D4
Controller 800679	There is no error message when an SIB or VIB block is loaded to another card in the cage and the SIB or HOB tag field has an incorrect address.	D4
Controller 801113	If you change an HOB from digital to analog, you must execute the “Update xmtr variables” command to implement the change.	D4
Controller 801387	System flags for block inputs A through O are interpreted as user flags.	D4
Controller 801388	A secondary master device may not be able to calibrate a smart output field device if the RS3 changes the HOB mode during an upload.	D4
Controller 801426	RS3 V18R2.3 cannot support some PLCs because RS3 asks for more coils than are configured in the PLC.	D4
Controller 801471	On HOB, when the HOB is switching back from digital to analog, the valve display does not automatically show the right control mode.	D4
Documen-tation 800660	If the new ASCII file is smaller than the original file, the ASCII conversion is successful, but an alarm says it was unsuccessful.	D3
Documen-tation 801990	Process Unit Icons (multiple in main, illegal) swapping unit names.	D4
Documen-tation 802070	SCI hangs periodically every 2 to 3 days.	D4
I/O 152324	Transmitter 9739 hardware alarms can overwhelm the maintenance log.	D3
I/O 800487	Downloading an FIM program on a controller Serial communication line fails, if the SIB block is configured and in alarm mode.	D4
I/O 801262	When a 4080 FIM is installed as a discrete I/O cold spare, sometimes it does not take over and start communicating with the controller.	D4

Section 4:
Version P1 Changes to RS3™ Manuals

This section describes changes to the following Version P1 manuals:

- *Console Configuration Manual*
- *Disk and Tape Functions Manual*
- *Alarm Messages Manual*

These changes were made after the Version P1 manuals were released, so they supplement or correct the Version P1 set.

Console Configuration Manual Changes

In Chapter 1, Section 2 of the Console Configuration Manual, Table 2.1.2 (Console Configuration Screen Fields) includes a description of the Tape Drive Type field. There is a new tape drive type (Tandberg). The page of the table that includes the change is shown below.

Tags or Addresses	Specifies whether blocks are identified by tag or by address on screen displays at this console. Press [ENTER] to change the entry. • **Tags** specifies that blocks are identified by tag. • **Addresses** specifies that blocks are identified by address.
Tag Mask	Specifies portions of 16-character tags that do not appear on screens. Hiding redundant or extraneous parts of the tag can make it easier for the operator to identify blocks while viewing screens.
Tag Position	The "Tag Position" field appears only when the cursor is resting in the "Tag Mask" field. It specifies the position of that character in the tag.
Tag Row Break	Specifies where a tag should be split if the default split is not acceptable.
Tape Auto Load	Specifies whether or not tapes are automatically loaded when inserted. • **Yes** specifies that tapes are automatically loaded when inserted. • **No** specifies that a manual tape load procedure must be performed to load a tape.
Tape Drive Type	Displays the tape drive on a console acting as a Master Node. Possible displays are: • RS3*T1 45S (Scorpion qic-24 format) • RS3*T2 60S (Viper 2060S qic-24 format) • RS3*T3 150S (Viper 2150S qic-150 format) • RS3*T4 TDC 3660 (Tandberg 3660 qic-150 format) For more information about tape drive types and specifications, see DT:1.
This is Node	Displays the node number and console type.
Time	Displays the current time on all PeerWay nodes. Changes to one console will change all nodes. **NOTE:** Under a password security system, this field is designated with an asterisk (*), and may only be changed by a system manager (sysmgr).
Time Correction	For HIA use only. Used with the highest-addressed operator interface on the local Peerway to synchronize the HIA (Highway Interface Adapter) tic master. Only a time correction on the tic master affects the system.
Title for Login screen	Title for the system login screen. Enter up to 40 alphabetic characters including spaces.

Disk and Tape Functions Manual Changes

The following changes apply to the *Disk and Tape Functions Manual.*

Tape Drive Type

There is an additional tape drive to add to Table 1.1.1. in Chapter 1, Section 1. In addition, the capacity of the tape drives has been modified.

Tape Drives and Recommended Cartridges

Screen Option	Tape Drive	Cartridge Type	Format	Capacity
RS3*T1 45S	Scorpion	DC300XLP	qic-24	32 MB
RS3*T2 60S	Viper 2060S	DC600A(1) DC300XLP(1)	qic-24 qic-24	57.6 MB 33.5 MB
RS3*T3 150S	Viper 2150S(2)	DC6150(3)	qic-150	125 MB
RS3*T4 TDC 3660	Tandberg 3660	DC6150 DC6250	qic-150	125 MB 200 MB

(1) You can use the DC600A & DC300XLP data cartridges (qic-24 formatted) in the Viper 2150S drive for read operations only; however, if used in the Viper 2150S for write operations (Backup, Tape Init or Create Boot Tape), these cartridges generate the following disk alarm even though the tape cartridge is not write protected: Tape Write Protected.

(2) The Viper 2150S drive also reads, loads, and restore files using the qic-24 data cartridge. This drive can read a tape made on a Scorpion or Viper 2060S, but the Scorpion and 2060S cannot read tapes made on the 2150S.

(3) The DC6150 data cartridge with qic-150 data, installed in the Viper 2060S drive for the "Tape Load" operation generates the following disk alarm: Uninitialized Tape in Drive.

NOTE: A typical 'Tape Load' operation with 1000 files (125MB) of data in the tape cartridge takes about 33 minutes.

The following replaces information in the P1 *Disk and Tape Functions Manual,* Chapter 4, Section 1, starting on page 4–1–1.

This section presents the following information:

- Device error messages and corrective action
- Typical problems that can occur when performing disk and tape operations and possible ways to handle them

Device Error Messages

The following tables list device error messages that may occur when you are performing a disk activity. Device error messages are preceded by “DX:” when displayed on the console screen.

Device Error Messages for the Hard Disk

Message	Meaning	Action
Hardware Error	A non-recoverable hardware failure in the hard drive has been detected.	Check the SCSI board and cable; replace the hard drive unit if necessary.
Medium Error	The hard disk probably has bad magnetic medium.	Replace the hard drive unit.
Drive Not Ready	The hard drive cannot be accessed at the present time; the hard drive may be doing a recalibration.	Try the disk activity later.

Device Error Messages for the Tape Drive

Message	Meaning	Action
End of Tape Encountered or End of Data Encountered	The end of the tape / end of data was encountered during a WRITE to the tape drive. *or* A tape cartridge is not installed in the tape drive.	Use a new tape cartridge. *or* Insert a tape cartridge in the tape drive.
Tape Unloaded or Not in Drive	A tape cartridge has been unloaded or is not installed in the drive.	Load / Insert a tape cartridge in the drive.
Reached Medium End of Tape /Data	The tape drive has encountered the end of tape / data.	Use a new tape cartridge.
Hardware Error	A non-recoverable hardware failure has been detected in the tape or hard drive.	Check the SCSI board and cable; replace the tape drive unit, if necessary.
Tape May Have Been Changed	The tape cartridge was changed prior to the current operation.	Reload the tape from the Disk Directory PeerWay screen.
Tape Retries Occurred (Check Medium)	An non-recoverable data error has been encountered in the tape medium.	Use a new tape cartridge.
Write Attempted before End of Data	Tape write operation Incomplete.	Retry the tape operation.
Tape Write Protected or Wrong Type	The cartridge installed in the tape drive is write-protected.	Remove the tape cartridge and change the protection switch position.

Alarm Messages Manual Changes

This change to chapters 3 and 4 of the *Alarm Messages Manual* is a result of the new disk–only console. Alarm 419 will occur normally on all disk–only consoles.

No.	Message	Description	List	Alarm Area
419	No Tape or Floppy Drive Found	Occurs when the RS3 cannot detect the presence of a tape or floppy drive. You should check your cable connections. This error may also occur when a disk–only (040) console is the only storage media present. In this case, the error is merely a verification of that hardware.	S	Disk

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RS3™
Software Release Notes

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